



Attorney Docket No. 555255012472

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Geyi Wen, et al.

Serial No.:

10/613,109

Int'l. Filing Date:

07/02/2003

For:

MULTIPLE-ELEMENT ANTENNA

Art Unit:

2821 -

Examiner:

Not yet assigned

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56, applicants hereby advise the United States Patent and Trademark Office of certain references which may be material to the determination of patentability of the above-identified application. The references are identified on the attached Form PTO-1449. Copies of the "foreign" and "other" references are enclosed. Applicants respectfully request that these references be considered and made of record in the present application by completing and returning the enclosed Form PTO-1449.

No fee is believed to be due for entry of this Information Disclosure Statement. However, if any fee should be required, please charge such fee to Jones Day's Deposit Account No. 501432, Reference No. 555255012472.

Respectfully/submitted,

I hereby certify that this correspondence is being deposited today with the United States Postal Service as first class mail in an envelope addressed of Commissioner for Patents, P.O. Box 145... Alexandria, VA 22313-1450

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Ву.\_

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FORM PTO-1449 (Modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

## INFORMATION DISCLOSURES STATEMENT BY APPLICANT (Use several sheets if necessary)

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Atty Docket No.: 555255012472

Wen, et al.

Serial No.: 10/613,109

Filing Date: 07/02/2003

Group: 2821

Applicant::

(37 CFR 1.98(b))

1								U.S. PATENT	DOCUMENTS		· · · · · ·	
Exam. Init.	Patent Number					Issue Date	Patentee	Class	Subclass	Filing Date		
	3	5	2	1	2	8	4	07/1970	Shelton et al.	343	702	
	3	5	9	9	2	1	4	08/1971	Altamayer	343	724	
	3	6	2	2	8	9	0	11/1971	Fujimoto et al.	325	375	
	3	6	8	3	3	7	6	08/1972	Pronovost	343	5 PD	
	4	0	2	4	5	4	2	05/1977	Ikawa et al.	343	702	
	4	4	7	1	4	9	3	09/1984	Schober	455	90	
	4	5	0_	4	8	3	4	03/1985	Garay et al.	343	749	
	4	5	4	3	5	8	1	09/1985	Nemet	343	702	
	4	5	7	1	5_	9	5	02/1986	Phillips et al.	343	702	
	4	5	8	4	7	0	9	04/1986	Kneisel et al.	455	78	
	4	5	9	0	6	1	4	05/1986	Erat	455	270	
	4	7	3	0	1	9	5	03/1988	Phillips et al.	343	792	
	4	8	3	9	6	6	0	06/1989	Hadzoglou	343	715	
	4	8	4	7	6	2	9	07/1989	Shimazaki	343	901	
	4	8	5	7	9	3	9	08/1989	Shimazaki	343	715	
	4	8	9	0	1	1	4	12/1989	Egashira	343	702	
	4	8	9	4	6	6	3	01/1990	Urbish et al.	343	702	
	4	9	7	5	7	1	1	12/1990	Lee	343	702	
	5	0	3	0	9	6	3	07/1991	Tadama	343	702	
	5	1	3	8	3	2	8	08/1992	Zibrik et al.	343	702	
	5	2	1	4	4	3	4	03/1993	Hsu	343	702	·
	5	2	1	8	3	7	0	06/1993	Blaese	343	702	
	5	2	2	7	8	0	4	07/1993	Oda	343	702	
	5	2	4	5	3	5	0	09/1993	Sroka	343	702	
	5	3	4	7	2	9	1	09/1994	Moore	343	749	
	5	3	7	3	3	0	0	12/1994	Jenness et al.	343	102	
	5	4	2	0	5	9	9	05/1995	Erkocevic	343	828	
	5	4	2	2	6	5	1	06/1995	Chang	343	749	
	5	4	5	1	9	6	5	09/1995	Matsumoto	343	702	
	5	4	9	3	7	0	2	02/1996	Crowley et al.	455	89	
	5	4	5	1	9	6	8	09/1996	Emery	343	749	
	_ 5	6	8	4	6	7	2	11/1997	Karidis et al.	343	702	

, u.		5	2	5	7	0	3	2	10/1993	Diamond et al.				
		5	4	5	7	4	6	9	10/1995	Diamond et al.				
		5	7	6	7	8	1	1	06/1998	Mandai et al				
100	/	5	8	2	1	9	0	7	10/1998	Zhu et al.				
011	3	5	8	4	1	4	0	3	11/1998	West				
0.5	man 5	5	8	7	0	0	6	6	02/1999	Asakura et al				
JAN 0 5	2001 E	5	8	7	2	5	4	6	02/1999	Ihara et al.				
JAN 8 5	.5	5	9	0	3	2	4	0	05/1999	Kawahata et al.				
RADE	abore	5	9	6	6	0	9	8	10/1999	Qi et al.		7	AT THE TO	
		5	9	7	3	6	5	1	10/1999	Suesada et al				
		5	9	9	0	8	3	8	11/1999	Burns et al.				
		6	0	2	8	5	6	8	02/2000	Asakura et al				
		6	0	3	1	5	0	5	02/2000	Qi et al.				
		6	3	2	9	9	5	1	12/2001	Wen et al.				
		6	6	6	4	9	3	0	12/2003	Wen et al.				
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Exam. Init.		0		Docum 4	nent N	umber			Publication Date	Country or Patent Office	ION	Subclass	Trans	slation
		0	5	4	nent N	umber	4	5	Publication Date 05/1993	Country or Patent Office		Subclass		
		0	5	7	nent N 3	umber 6	4 2	5 4	Publication Date 05/1993 11/1993	Country or Patent Office EPO EPO		Subclass		
		0	5 5 7	4 7 6	3 1 5	umber 6 1	4 2 0	5 4 1	Publication Date 05/1993 11/1993 03/1997	Country or Patent Office EPO EPO EPO		Subclass		
		0	5 5 7 8	4 7 6	3 1 5	umber 6 1 0	4 2 0 3	5 4 1 6	Publication Date 05/1993 11/1993 03/1997 12/1997	Country or Patent Office  EPO  EPO  EPO  EPO		Subclass		
		0 0	5 5 7 8	4 7 6 1 9	3 1 5 4	umber 6 1 0 5	4 2 0 3 5	5 4 1 6	Publication Date 05/1993 11/1993 03/1997 12/1997 01/1999	Country or Patent Office  EPO  EPO  EPO  EPO  EPO		Subclass		
		0 0 0 0 2	5 5 7 8 8	4 7 6 1 9	1 5 4 2 0	0 5 4	4 2 0 3 5	5 4 1 6 9	Publication Date 05/1993 11/1993 03/1997 12/1997 01/1999	Country or Patent Office  EPO  EPO  EPO  EPO  GB		Subclass		
		0 0 0 2 5	5 7 8 8 3	4 7 6 1 9 3	1 5 4 2 0 7	umber 6 1 0 5 4 9	4 2 0 3 5 5	5 4 1 6 9 1	Publication Date 05/1993 11/1993 03/1997 12/1997 01/1999 05/1999	Country or Patent Office  EPO  EPO  EPO  EPO  GB  JP		Subclass		
		0 0 0 2 5 5	5 7 8 8 3 0	4 7 6 1 9 3 0	1 5 4 2 0 7 7	umber 6 1 0 5 4 9 1 5	4 2 0 3 5 5 0	5 4 1 6 9 1 9	Publication Date  05/1993  11/1993  03/1997  12/1997  01/1999  05/1999  01/1993  12/1993	Country or Patent Office  EPO  EPO  EPO  EPO  GB  JP  JP		Subclass		
		0 0 0 2 5 5	5 5 7 8 8 3 0 3	4 7 6 1 9 3 0 4 4	nent N 3 1 5 4 2 0 7 7	umber 6 1 0 5 4 9 1 5 8	4 2 0 3 5 5 0 0	5 4 1 6 9 1 9 7 6	Publication Date 05/1993 11/1993 03/1997 12/1997 01/1999 05/1999 01/1993 12/1993 11/1980	Country or Patent Office  EPO  EPO  EPO  EPO  GB  JP  JP  JP (Oouchi)		Subclass		
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	Microwave Journal, May 1984, p. 242, advertisemen hand column	t of Solitron/Microwave, XP002032716 various RF connectors with posts see left
	PATENT ABSTRACTS OF JAPAN, vol. 017, no. 264 1993, abstract; figures 1-3, 5-7	(E-1370), May 24, 1993 & JP 05 007109 (Mitsubishi Electric Corp.), January 14,
	PATENT ABSTRACTS OF JAPAN, vol. 018, no. 188 1993, abstract; figures 1-19	(E-1532), March 31, 1994 & JP 05 347507 A (Junkosha Co Ltd), December 27,
xaminer		Date Considered

